MEMBRANE FOR USE WITH IMPLANTABLE DEVICES

Abstract of the Disclosure

The present invention provides a biointerface membrane for use with an implantable device that interferes with the formation of a barrier cell layer including; a first domain distal to the implantable device wherein the first domain supports tissue attachment and interferes with barrier cell layer formation and a second domain proximal to the implantable device wherein the second domain is resistant to cellular attachment and is impermeable to cells. In addition, the present invention provides sensors including the biointerface membrane, implantable devices including these sensors or biointerface membranes, and methods of monitoring glucose levels in a host utilizing the analyte detection implantable device of the invention. Other implantable devices which include the biointerface membrane of the present invention, such as devices for cell transplantation, drug delivery devices, and electrical signal delivery or measuring devices are also provided.

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